

TRAINING SECTION OFFERS NEW COURSE

Stephanie Goodwin, EPD Training Manager

A new course, Hazardous Waste Generation and Certification Review, or EP0006R, was offered by the EPD Training Section beginning in January 1996. This course was developed in response to requests from hazardous and mixed waste generators who needed a shorter version of EP0006 to meet a requirement to refresh their training every 12 months. The course reviews the major concepts of the waste generation and certification process. It includes a review of the changes in federal and state regulations and how they apply to waste management operations at LLNL. The EP0006R course is 1-1/2 hours long and uses case studies that require student participation.

The prerequisite for EP0006R is EP0006. For further information or course dates, refer to the Laboratory Course Bulletin or call the EPD training coordinator, Linda Lucchetti, at ext. 2-9236.



HWM HOTLINE
3-4806



Environmental Protection Department
Hazardous Waste Management Division
Lawrence Livermore National Laboratory

CERTIFICATION OF LOW-LEVEL WASTE

Annette Andrade, Waste Certification Program

Certified low-level waste is waste that is generated on a project for which a certification program for off-site waste disposal has been developed, approved, and implemented. Section 3.2 of the *Waste Acceptance Criteria* provides a complete discussion on certified low-level waste.

Certifiable waste is waste that has been properly identified and characterized by the generator, with reference to process knowledge and regulatory criteria. LLNL generators who work on projects without pre-approved waste certification programs should take steps to ensure that their waste is certifiable. Otherwise, these wastes will need to undergo an expensive characterization process. Furthermore, non-certifiable waste is accepted in the waste yards only on a case-by-case basis.

For further information, contact Annette Andrade at ext. 3-0706 or pager 01744; other contacts are your HWM field technician or EPD environmental analyst.

WASTE MATTERS is published by HWM to inform generators of the latest regulations in waste handling and management.

To receive this bulletin, call 2-6761. The publishing staff welcomes any questions, suggestions, or ideas for articles; please contact the technical editors listed below:

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WASTE MATTERS

HWM

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APRIL 1996

HOW TO TRANSFER WASTE TO A WAA

Daniel Hoyt, HWM Documents and Assessments

A Waste Accumulation Area (WAA) is an interim storage facility maintained by an LLNL Program or the Hazardous Waste Management Division, based on a Memorandum of Understanding between the Program and HWM. Waste generators may transfer waste into a WAA by following established procedures. In addition to providing a safe transfer, the procedures assure that waste is tracked, inspected, and documented properly throughout its existence at the Laboratory site.

- Characterize the waste in as much detail as possible on the WDR, using process knowledge or analytical data.
- Submit the WDR to the HWM field technician for approval.

Other:

- Submit a Material Safety Data Sheet (MSDS) if the waste is an unused or spent manufactured chemical product.
- If analysis is needed, fill out a CES chain of custody form (see <http://www-cms.llnl.gov/ces>).

The Generator's Responsibilities

Pack properly:

- Store the waste in a suitable, chemically compatible, properly sealed container.
- Check the container to verify that it is clean and free of external contamination.
- Use the proper waste label, fill it out completely and accurately, and affix it to the container.

Use the WDR:

- Fill out and sign the Waste Disposal Requisition (WDR) form.

Contacts

- The HWM field technician will review the container and its associated paperwork, so contact your HWM field tech prior to any transfer of waste to a WAA. Messages may be left at ext. 3-1996.
- If needed, contact an HWM review chemist (at ext. 2-8834 or 3-6059) for assistance on waste issues.
- Guidance is also available through the EPD environmental analyst and Hazards Control ES&H team members.

—inside—

Flowchart of the Cradle-to-Grave Cycle of Hazardous Waste

LLNL programs and experimenters generate hazardous, radioactive, and mixed waste that must be collected, stored, treated, and disposed of by the Hazardous Waste Management Division. The flowchart inside this issue of Waste Matters shows the efforts devoted by HWM staff to managing waste. These efforts have the objective of protecting the environment, human safety, and health.



REVISITING THE MSDS

Dick Crawford, HWM Deputy Division Leader

It is always a good idea to get an MSDS for a material or product that may end up as hazardous waste. The MSDS is a required part of the documentation accompanying many wastes sent to HWM for treatment, storage, or disposal.

MSDSs may be obtained from Hazards Control, which is the official repository for them at LLNL. An HWM field technician can also help locate a needed MSDS. In both cases the MSDS search is provided only as a courtesy to the generator. The generator has the primary responsibility for obtaining the required MSDS.

Cradle-to-Grave Cycle of Hazardous Waste

1. The generator of hazardous waste is responsible for packaging the waste by sealing it in a suitable, secure container.



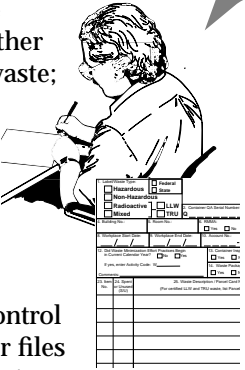
2. The generator puts a waste label on the container to identify its contents.

3. The generator also completes a Waste Disposal Requisition (WDR) form, which contains more specific data than the container label.

LAWRENCE LIVERMORE NATIONAL LABORATORY	
WASTE DISPOSAL REQUISITION	
Waste Run Date: _____	
1. Generator Name: _____	
2. Generator Address: _____	
3. Generator Phone: _____	
4. Generator Email: _____	
5. Generator Signature: _____	
6. Generator Title: _____	
7. Generator Date: _____	
8. Generator Location: _____	
9. Generator Contact: _____	
10. Generator Notes: _____	
11. Generator Comments: _____	
12. Generator Remarks: _____	
13. Generator Remarks: _____	
14. Generator Remarks: _____	
15. Generator Remarks: _____	
16. Generator Remarks: _____	
17. Generator Remarks: _____	
18. Generator Remarks: _____	
19. Generator Remarks: _____	
20. Generator Remarks: _____	
21. Generator Remarks: _____	
22. Generator Remarks: _____	
23. Generator Remarks: _____	
24. Generator Remarks: _____	
25. Generator Remarks: _____	
26. Generator Remarks: _____	
27. Generator Remarks: _____	
28. Generator Remarks: _____	
29. Generator Remarks: _____	
30. Generator Remarks: _____	

4. A Material Safety Data Sheet (MSDS) for a hazardous material product must accompany the WDR. For non-product-type waste, generators may use process knowledge of the waste constituents or the on-site Chemistry and Materials Science Environmental Services laboratory to obtain chemical analysis reports for the wastes. Both the MSDS and analytical report list hazardous components of the waste; this information helps waste handlers to accomplish their tasks safely.

9. An HWM review chemist reviews the WDR for accuracy and waste compatibility; evaluates whether there is radioactivity in the waste; enters the state and federal codes and identifying information on the WDR; approves it; and signs it.



8. The HWM Operations Control Office (OCO) begins computer files for the barcoded waste and assigns a waste run date for its transfer from the WAA to an HWM storage facility. The barcode information is downloaded to the Requisition Control Office (RCO), which maintains a list of containers at the WAA and keeps active records of all waste from the time it is placed on the waste run until it is shipped off site; then, records are permanently archived.

7. The HWM field technician attaches a barcode label to the container and scans it. This initiates the internal waste tracking system which follows the waste to its final disposition. The HWM field technician then signs the WDR to indicate that the waste has been examined.

6. At the WAA, an HWM field technician checks the waste container's physical condition, its label, its WDR (for waste compatibility and correct information), and makes sure the appropriate MSDS or analytical report is attached.

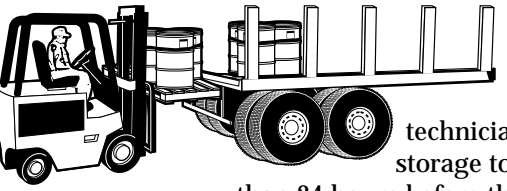


5. The generator or HWM field technician places the container in a designated Waste Accumulation Area (WAA) within 3 calendar days of the workplace end date, where it can remain for up to 90 days from the workplace end date before transfer to an HWM storage facility.

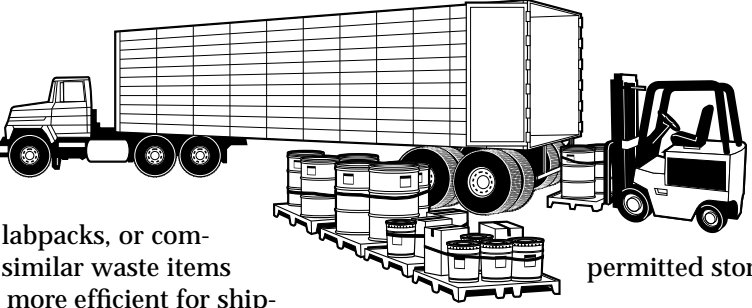
10. Before the waste run, an HWM facility technician uses a Waste Run Precheck Information form to check that the waste packaging and labeling comply with federal and state regulations. If so, the waste is approved for pickup.

WASTE RUN PRECHECK INFORMATION FORM	
1. Generator Name: _____	2. Generator Address: _____
3. Generator Phone: _____	4. Generator Email: _____
5. Generator Signature: _____	6. Generator Title: _____
7. Generator Date: _____	8. Generator Location: _____
9. Generator Contact: _____	10. Generator Notes: _____
11. Generator Comments: _____	12. Generator Remarks: _____
13. Generator Remarks: _____	14. Generator Remarks: _____
15. Generator Remarks: _____	16. Generator Remarks: _____
17. Generator Remarks: _____	18. Generator Remarks: _____
19. Generator Remarks: _____	20. Generator Remarks: _____
21. Generator Remarks: _____	22. Generator Remarks: _____
23. Generator Remarks: _____	24. Generator Remarks: _____
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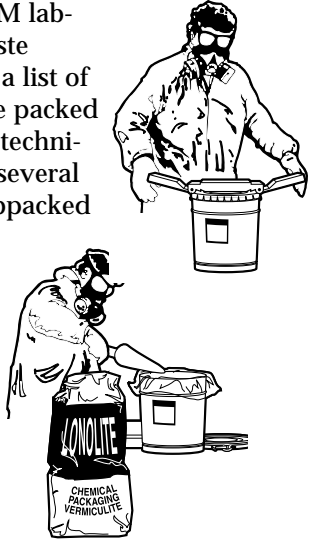
11. HWM facility personnel pick up approved waste from the WAA. The HWM facility technician again checks each waste container's condition and then scans the containers, moves them onto a pallet, straps them together, transfers the pallets to a truck, and secures them.



12. At the HWM storage facility, HWM facility technicians unload the waste into a staging area where it may remain for a maximum of 24 hours before being moved to a permitted storage unit. The arrival time of the waste at the storage facility starts a one-year time limit within which the waste must be treated or disposed of.



13. HWM labpacks, or combines, some similar waste items because it is more efficient for shipping and disposal. The HWM lab-pack analyst reviews the waste container data and provides a list of waste containers that may be packed together. The HWM facility technician repacks the contents of several waste containers into one labpacked drum, scanning the barcode of each waste item as it is labpacked.



14. The drum is filled with vermiculite, an adsorbent material, and is permanently sealed.

19. The licensed transporter signs the manifest to acknowledge receipt of the waste.

WASTE MANIFEST	
1. Generator Name: _____	2. Generator Address: _____
3. Generator Phone: _____	4. Generator Email: _____
5. Generator Signature: _____	6. Generator Title: _____
7. Generator Date: _____	8. Generator Location: _____
9. Generator Contact: _____	10. Generator Notes: _____
11. Generator Comments: _____	12. Generator Remarks: _____
13. Generator Remarks: _____	14. Generator Remarks: _____
15. Generator Remarks: _____	16. Generator Remarks: _____
17. Generator Remarks: _____	18. Generator Remarks: _____
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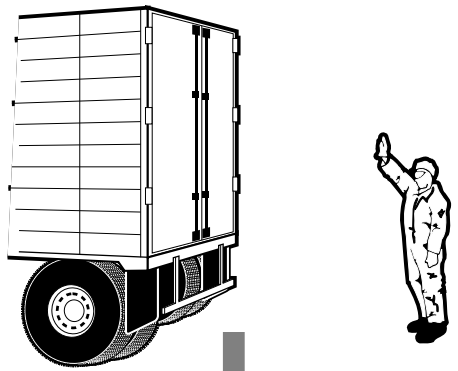
18. An HWM facility technician transfers the waste from storage to a staging area no more than 24 hours before the shipment and then loads and secures the waste onto the truck.

17. The HWM Shipping Office reviews the waste, selects and confirms an outside Treatment, Storage, and Disposal Facility (TSDF) to accept and treat or dispose of the waste. A manifest form, including generator information, TSDF information, and Department of Transportation codes, is prepared. A licensed transportation company is hired to ship the waste to the TSDF.

16. The labpacked waste is segregated according to its hazardous properties and compatibility, and is transferred to a permitted storage unit.

15. The scanned data are downloaded to the RCO's files to provide a final list of waste in the drum. This Outer Container Inventory List (OCIL) is reviewed by the HWM review chemist. The OCIL assigns a labpack number to the drum, lists all the materials that have been packed inside, and references each item back to its original WDR number.

20. The waste leaves the Laboratory.



21. When the waste arrives at the permitted TSDF, the facility owner signs the manifest and returns a copy to the Laboratory. This signals that the shipment has reached its final disposition. Manifest information is entered into the database, and this completes the hazardous waste life cycle.

22. Representatives from HWM periodically audit the operational procedures of TSDFs, and HWM prepares annual and biennial reports for state and federal agencies as a record of all waste operations at the Laboratory.

